

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT
ON THE TECHNICAL AND OPERATIONAL FEASIBILITY OF ENABLING
FLEXIBLE USE OF THE 700 MHZ PUBLIC SAFETY NARROWBAND
ALLOCATION AND GUARD BAND FOR BROADBAND SERVICES**

)

)

)

) PS Docket No. 06-229

))

)

)

**COMMENTS BY ADAMS COUNTY COMMUNICATIONS CENTER ON
THE TECHNICAL AND OPERATIONAL FEASIBILITY OF ENABLING
FLEXIBLE USE OF THE 700 MHZ PUBLIC SAFETY NARROWBAND
ALLOCATION AND GUARD BAND FOR BROADBAND SERVICES**

ADAMS COUNTY COMMUNICATIONS CENTER

Walter F. Leslie

Senior Communications Technician

7321 Birch Street,

Commerce City, Colorado 80022

Wleslie@adcom911.org

- I Background 4
- II What is the current and anticipated use of 700 MHz narrowband networks? 4
- III Would the flexibility to offer broadband services in all or a portion of the 700 MHz narrowband spectrum and/or the guard band promote more efficient use of 700 MHz public safety spectrum? 4
- IV If the Commission were to allow flexible use of 700 MHz narrowband spectrum and/or the guard band, would broadband operations in this spectrum potentially interfere with existing or future public safety narrowband operations? 5
- V What impact would allowing flexible use of all or a portion of narrowband spectrum have on the continued ability to support nationwide narrowband interoperability? 5
- VI How much, if any, of the narrowband allocation and guard band should be made available for broadband operations? 5
- VII If flexibility in the narrowband spectrum were allowed, what role should the 700 MHz RPCs and the states play in its implementation? 5
- VIII What would be the impact of allowing flexibility on the development of broadband, narrowband, and dual-use equipment in the 700 MHz public safety spectrum? 5
- IX If the Commission were to permit flexible use of the narrowband spectrum, what if any impact should this have on the existing rules that require 700 MHz narrowband systems to narrowband to 6.25 kHz bandwidth channels by December 31, 2016? 6

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT
ON THE TECHNICAL AND OPERATIONAL FEASIBILITY OF ENABLING
FLEXIBLE USE OF THE 700 MHZ PUBLIC SAFETY NARROWBAND
ALLOCATION AND GUARD BAND FOR BROADBAND SERVICES**

)

)

)

) PS Docket No. 06-229

))

)

)

**COMMENTS BY ADAMS COUNTY COMMUNICATIONS CENTER ON
THE TECHNICAL AND OPERATIONAL FEASIBILITY OF ENABLING
FLEXIBLE USE OF THE 700 MHZ PUBLIC SAFETY NARROWBAND
ALLOCATION AND GUARD BAND FOR BROADBAND SERVICES**

Adams County Communications Center (ADCOM 911), as a first round recipient of a 700 MHz Public Safety Broadband Waiver,¹ and a 700 MHz Public Safety Narrowband Licensee, hereby submits these comments in response to the Commission's September 28, 2010 Public Notice (DA 10-1877) wherein the Public Safety and Homeland Security Bureau seeks comment on the feasibility of allowing for flexible use of the 700 MHz public safety narrowband spectrum. Specifically, seeking to explore whether allowing public safety the option of using 700 MHz narrowband spectrum for broadband services would be operationally feasible and technically compatible with existing and future public safety narrowband operations. In these comments ADCOM 911 will address the eight (8) issues published in the Public Notice (DA 10-1877).

I Background

Adcom911 has been a participating member of the Region 7 - 700 MHz Regional Planning Committee (RPC) since its inception in 2001. Adcom911 submitted the first license application request to the Region 7 RPC to acquire 700 MHz spectrum. Adcom911 constructed the first Public Safety Simulcast Network in Colorado using the 700 MHz Narrowband Spectrum. Adcom911 was granted a first round waiver to construct a Regional 700 MHz Public Safety Broadband Network as a Long Term De Facto Transfer Spectrum Lessee to the Public Safety Spectrum Trust (PSST). In September of 2010 Adcom911 received a Broadband Technology Opportunity Program (BTOP) grant award to construct the broadband network. Therefore Adcom911 has a substantial interest in the future of the 700 MHz Public Safety Spectrum. Adcom911 believes that there will be an on going need for both narrowband and broadband public safety networks to serve public safety through at least the next decade.

II What is the current and anticipated use of 700 MHz narrowband networks?

In Region 7 (Colorado), the metropolitan areas on the Eastern Slope of the Rocky Mountains are highly populated and the 800 MHz Public Safety allocations have all been assigned. Expansion capability doesn't exist in the 800 MHz spectrum. Therefore, Public Safety agencies in Region 7 expect to fully utilize the 700 MHz Narrowband Spectrum for narrowband communications. Currently there are twenty three (23) 700 MHz narrowband licenses in operation throughout fourteen (14) of the sixty four (64) counties in Region 7. Adcom911 also is laying the groundwork to allow the 700 MHz Public Safety Broadband Network to expand statewide assuming a future expansion of the current coverage area allowed by the initial waiver. The Denver Urban Areas Security Initiative Region and the North Central All-Hazards Emergency Management Region (UASI/NCR) Communications Committee has already started discussions on applying for a waiver to expand the 700 MHz Broadband coverage area to include most of the Denver Metropolitan Area. Clearly the use of both narrowband and broadband technologies play an important role for Public Safety Communications in Region 7.

III Would the flexibility to offer broadband services in all or a portion of the 700 MHz narrowband spectrum and/or the guard band promote more efficient use of 700 MHz public safety spectrum?

Adcom911 believes offering broadband services in the guard band or any of the narrowband spectrum would create less efficiencies. Narrowband operations in the spectrum are typically broadcast operations which are extremely efficient at delivering basic public safety information to the many responders that need it. Delivery of these dispatch services from one to many using broadband technology is not yet as efficient as narrowband voice. We have also clearly shown the need for narrowband operations in the 700 MHz spectrum due to the lack of availability of other suitable narrowband spectrum and the current deployment of narrowband systems.

IV If the Commission were to allow flexible use of 700 MHz narrowband spectrum and/or the guard band, would broadband operations in this spectrum potentially interfere with existing or future public safety narrowband operations?

Broadband technologies have interfered with narrowband operations when the two technologies were used in the same spectrum allocation in the past. This was recognized by the Commission when they initially allocated the spectrum and resulted in a guard band to separate the broadband and narrowband allocations. The risk of interference between technologies still exists. If the Commission were to allow flexible use of the spectrum without adequate guard bands between the broadband and narrowband operations, interference would potentially exist and could hinder public safety missions.

V What impact would allowing flexible use of all or a portion of narrowband spectrum have on the continued ability to support nationwide narrowband interoperability?

The flexible use of the all or a portion of the narrowband spectrum would negatively affect nationwide narrowband interoperability as it is assigned in the spectrum today. To preserve nationwide narrowband interoperability in the spectrum, the narrowband interoperability channels would need to be assigned to a dedicated narrowband spectrum block furthest from possible broadband operations and separated by adequate guard band.

VI How much, if any, of the narrowband allocation and guard band should be made available for broadband operations?

Adcom911 believes that the existing allocations should stay in place as they are.

VII If flexibility in the narrowband spectrum were allowed, what role should the 700 MHz RPCs and the states play in its implementation?

If flexibility were allowed, the responsibility to manage that flexibility should rest with the RPC. The RPC represents the needs of the users in the region and can best protect those needs. The RPC is already responsible for allocating the narrowband spectrum, coordinating with adjacent regions and developing regional plans for spectrum usage. Implementation of flexibility within the spectrum would best be managed from this level.

VIII What would be the impact of allowing flexibility on the development of broadband, narrowband, and dual-use equipment in the 700 MHz public safety spectrum?

From an operational view, Adcom911 can see an advantage for some public safety users to have available a device that can operate on a narrowband network as well as being able to access a broadband network as needed. The development issues involved with this concept are beyond the scope of our experience.

IX If the Commission were to permit flexible use of the narrowband spectrum, what if any impact should this have on the existing rules that require 700 MHz narrowband systems to narrowband to 6.25 kHz bandwidth channels by December 31, 2016?

Should the Commission permit flexible use of the narrowband spectrum, It would be in the interest of public safety to designate a specified interoperability channel plan utilizing the existing 12.5 kHz bandwidth and allowing the RPC to determine the most efficient usage of the remainder of the spectrum. If flexibility were permitted it would be desirable to allow the RPC to manage the spectrum for narrowband, wideband and broadband technologies.

Adcom911 express its gratitude to the Bureau and the Commission for considering these comments.

October 27, 2010

Respectfully submitted,



Walter F. Leslie

Senior Communications Technician
Adams County Communications Center
Wleslie@adcom911.org